

ABSTRACT OF THE INVENTION

The present invention relates to methods for detection and evaluation of metabolic activity of oxidative reactions catalyzed by enzymes based upon their ability to consume dissolved oxygen. The methods utilize a luminescence detection system which makes use of the sensitivity of the luminescent emission of certain compounds to the presence of oxygen, which quenches (diminishes) the compound's luminescent emission in a concentration dependent manner. Enzymes catalyzing oxidative reactions will affect the oxygen concentration of a liquid medium in which they are immersed. Thus, this invention provides a convenient system to gather information on the presence, identification, quantification and activity of enzymes and oxidative reactions by determining their effect on the oxygen concentration of the media in which they are present.

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